

**MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM**

NR Eligible: yes ☐
no ☒

Property Name: SHA Bridge No. 8037, MD 234 over Allen's Fresh Inventory Number: CH-390
Address: MD 234 over Allen's Fresh/Wicomico River/Zekiah Swamp Historic district: ☐ yes ☒ no
City: Faulkner, MD Zip Code: 20632 County: Charles
USGS Quadrangle(s): Popes Creek
Property Owner: Maryland State Highway Administration Tax Account ID Number: _____
Tax Map Parcel Number(s): _____ Tax Map Number: 73
Project: MD 234 over Allen's Fresh Deck Replacement Agency: FHWA/SHA
Agency Prepared By: MD SHA
Preparer's Name: Anne E. Bruder Date Prepared: 10/13/2006
Documentation is presented in: Project Review and Compliance Files
Preparer's Eligibility Recommendation: _____ Eligibility recommended ☒ Eligibility not recommended
Criteria: ☐ A ☐ B ☒ C ☐ D Considerations: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G
Complete if the property is a contributing or non-contributing resource to a NR district/property:
Name of the District/Property: _____
Inventory Number: _____ Eligible: ☐ yes ☐ no Listed: ☐ yes ☐ no
Site visit by MHT Staff ☐ yes ☒ no Name: _____ Date: _____

Description of Property and Justification: *(Please attach map and photo)*

SHA Bridge No. 8037, MD 234 over Allen's Fresh Run, has been included in the Historic Highway Bridge Inventory as a metal rolled girder, concrete encased bridge dating from 1933. The bridge was initially documented in a Maryland Inventory of Historic Properties (MIHP) form prepared by staff of the State Highway Administration (SHA) in 1995, and assigned MIHP No. CH-390. The 1995 MIHP form incorrectly identifies SHA Bridge No. 8037 as located on MD 235 over Zekiah Swamp. MD 235 does not cross Zekiah Swamp, the Wicomico River, or Allen's Fresh Run in Charles County. Visual confirmation of the bridge number was used to determine the correct bridge location during a May 10, 2006 field visit by the SHA. SHA Bridge No. 8037 carries MD 234 over Allen's Fresh Run. Allen's Fresh Run is a tributary stream to the Wicomico River within Zekiah Swamp, which extends from northern Charles County to the Potomac River. All three names have historically been used as the name of the bridge crossing.

Allen's Fresh is the name of both a village and a stream in central southern Charles County. MD 234 over Allen's Fresh Run is a two-lane undivided highway with narrow shoulders. Based on a review of historic maps, the village and ancestral MD 234 have been in place since at least 1793, when the road is shown on Dennis Griffith's Map of Maryland. The village was one of the original colonial mail towns, designated as early as 1695 to have a post office. The Maryland State Roads Commission (SRC)

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ Eligibility not recommended ☒
Criteria: ☐ A ☐ B ☐ C ☐ D Considerations: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

MHT Comments:

Jim Jenkins ✓
Reviewer, Office of Preservation Services

10/16/06
Date

[Signature]
Reviewer, National Register Program

10/16/06
Date

200603328

took control of the unnamed road in Allen's Fresh during the early part of the twentieth century. The SRC Annual Report for 1931 through 1934 states that a 60-foot triple span bridge over the Wicomico River had been constructed to eliminate a one-way bridge and two dangerous curves. The 1933 plans show that the SRC relocated MD 234 to the south, bypassing the store/post office and the blacksmith's shop on the west bank of the Wicomico River (Allen's Fresh Run).

SHA completed additional work on MD 234 in the late 1950s or early 1960s. The store and blacksmith's shop do not appear on the 1958 plans, and the earlier buildings had been replaced by single family dwellings. The 2005 Charles County Tax Maps for this area indicate that the portion of Allen's Fresh Road that the SRC bypassed in the 1930s now belongs to the county. During its field visit in May 2006, SHA noted that the road is overgrown and unused. The former village on the west bank of Allen's Fresh Run is not visible either from MD 234 or in aerial photographs of the area. Today, Allen's Fresh is a farming district with scattered single family dwellings and associated agricultural buildings. SHA has concluded that construction of the MD 234 bypass, including the 1933 bridge, caused the small village of Allen's Fresh to fail.

The Interagency Historic Highway Bridge Inventory Committee (HHBIC) considered the MIHP form in 1996 and subsequently determined Bridge No. 8037 to be eligible for the National Register of Historic Places (NRHP). The Maryland Historical Trust (MHT) concurred with the eligibility determination in July 2001, as eligible under NRHP Criterion C (engineering). SHA believes the current eligibility determination is in error, as there were numerous aspects of the bridge that were not considered with respect to condition and integrity at the time of the initial evaluation. The MIHP documentation was prepared by SHA staff without adequate expertise in architectural history or engineering, and there was no oversight or quality control by managerial staff meeting the Secretary of Interior's Professional Qualifications Standards. No information was provided in the form from Bridge Inspection Reports (BIR) that were available for detailed condition assessments on a biannual basis dating from 1933. Errors and omissions in the MIHP documentation were not discovered in 1996 in part because the MIHP did not contain adequate supporting photographic documentation, and in part because no field visits to examine the bridge were conducted by the Interagency HHBIC prior to the recommendation of eligibility. No field examinations were subsequently undertaken by MHT prior to the 2001 determination of eligibility.

Factual errors identified by SHA that support a determination that Bridge No. 8037 is not NRHP eligible are offered. In the 1995 MIHP form for SHA Bridge No. 8037, SHA noted that 60% of the deck had been patched, that the parapet railing had missing balusters and rebuilt parapet endwalls, and that concrete encasement on a beam had been broken off. What was not stated in the original documentation is that SHA first made alterations to Bridge No. 8037 in 1978 when the original parapet endwalls were replaced. SHA's archived photograph of the bridge taken on September 27, 1933 (Attached) shows the large rectangular endposts at both approaches. These were replaced with SHA Type Endpost VII in 1978. These trapezoidal endposts are not as large or monumental as the 1933 endposts. Furthermore, the endpost style is not similar to the original and does not meet the Secretary of Interior's Standards for Rehabilitation. This major change significantly alters the drivers' experience when entering the bridge.

Additional information regarding condition was available in the BIR but not included in the initial documentation. In 1993, the BIR indicates that the deck had a rating of 4, the superstructure had a rating of 6 and the substructure had a rating of 8. The inspection report also noted that 2-1/2 inches of bituminous concrete had been placed on the deck. At that time SHA covered the surface of the parapets with pneumatically applied mortar (PAM). The PAM has obscured the decorative elements of the parapets. While the PAM application was noted in the MIHP form, the bridge's deck, superstructure and substructure ratings were not. Had this information been available, it would have indicated to the HHBIC that the bridge's concrete was beginning to fail.

In 1995, the bridge inspectors noted that because the deck had been recently overlaid with bituminous concrete, the concrete deck could not be fully inspected. Nevertheless, the inspectors could ascertain that at least 60% of the deck had been patched by that time. This information was included in the MIHP form. What was not included was the concomitant discussion in the report about

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____

Eligibility not recommended _____

Criteria: ___ A ___ B ___ C ___ D Considerations: ___ A ___ B ___ C ___ D ___ E ___ F ___ G

MHT Comments:

Reviewer, Office of Preservation Services_____
Date_____
Reviewer, National Register Program_____
Date

the concrete's condition. The inspectors noted areas of cracks with greenish stains along Girders 1 and 8 (the exterior girders). Furthermore, both the piers and the abutments displayed horizontal, vertical and map cracking with efflorescence and areas with previous mortar repairs. At the base of the two piers, the surfaces were experiencing severe concrete scale at the water line. SHA would note that scale is the delamination of the concrete's surface. The loss at the water line is a serious safety issue. Pier 1 also had major spalls in the concrete surface. Spalling is a result of the freeze/thaw cycle that causes the interior of the concrete or brick to crumble because the harder surface has been removed. Likewise, the presence of efflorescence indicates that water, dirt and other biologicals have penetrated the surface of the concrete and are growing on the concrete. The BIR concluded in 1995 that the deck was rated 4, the superstructure was rated 6 and the substructure rating dropped to a rating of 6. Because the information about the concrete's condition was not included in the MIHP form's discussion about integrity, the HHBIC assumed that SHA Bridge No. 8037 retained integrity of its primary character defining elements. In every biannual report since 1995, the bridge condition rating has remained unchanged with the deck rated at 4, the superstructure rated at 6, and the substructure rated at 6. The Bridge Sufficiency Rating (BSR) was also calculated biannually by the bridge inspectors, as required by federal law. In 1993, it was rated at 52. By 2005, it had fallen to 43.4, indicating a rapid decline in fabric over a short period of time.

The original MIHP form argues that Bridge No. 8037 retains all of its CDEs; however, the endposts have been replaced. Additionally the poor condition and the unsympathetic alterations were not adequately addressed during the first evaluation to convey that SHA Bridge No. 8037 did not retain integrity of materials, design, workmanship or feeling. At the time of the original evaluation, the Interagency HHBIC did not consider the issue of integrity at the level of detail that should have been addressed to make an accurate eligibility determination.

The most recent SHA BIR, dated December 13, 2005, states that the deck pavement is hollow and is heaving in several locations. The railing has been repaired by replacing the missing concrete balusters, and the entire surface remains covered in PAM that does not match the original color or texture of the bridge's concrete. According to the December 2005 bridge inspection report, additional balusters have lost concrete and rebar is exposed. SHA has made regular efforts to keep the bridge in good repair, but the treatment methods do not meet the Secretary's Standards for Treatment of Historic Properties (36 CFR Part 68). As a result, SHA Bridge No. 8037 exhibits poor integrity from the continuous loss of materials, design, workmanship and feeling. Based on this evaluation, it is SHA's determination that SHA Bridge No. 8037 is not eligible for inclusion in the NRHP under Criterion C (engineering). Additional research did not identify events or persons of significance and SHA Bridge No. 8037 is not eligible for inclusion in the NRHP under Criteria A or B. Criterion D was not evaluated as part of the historic standing structures studies for this project.

Notes:

The bridge rating scale is 0 (failing/worst condition) to 10 (excellent/new condition). When a portion of a bridge is rated at less than 5, federal requirements dictate that it be replaced because of unsafe conditions. If a portion of the bridge approaches 5, increased testing is also required.

Any BSR less than 50 requires that a bridge be replaced because of its unsafe condition.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____

Eligibility not recommended _____

Criteria: ___ A ___ B ___ C ___ D Considerations: ___ A ___ B ___ C ___ D ___ E ___ F ___ G

MHT Comments:_____
Reviewer, Office of Preservation Services_____
Date_____
Reviewer, National Register Program_____
Date

CH-390

14

ALLENS FRESH A

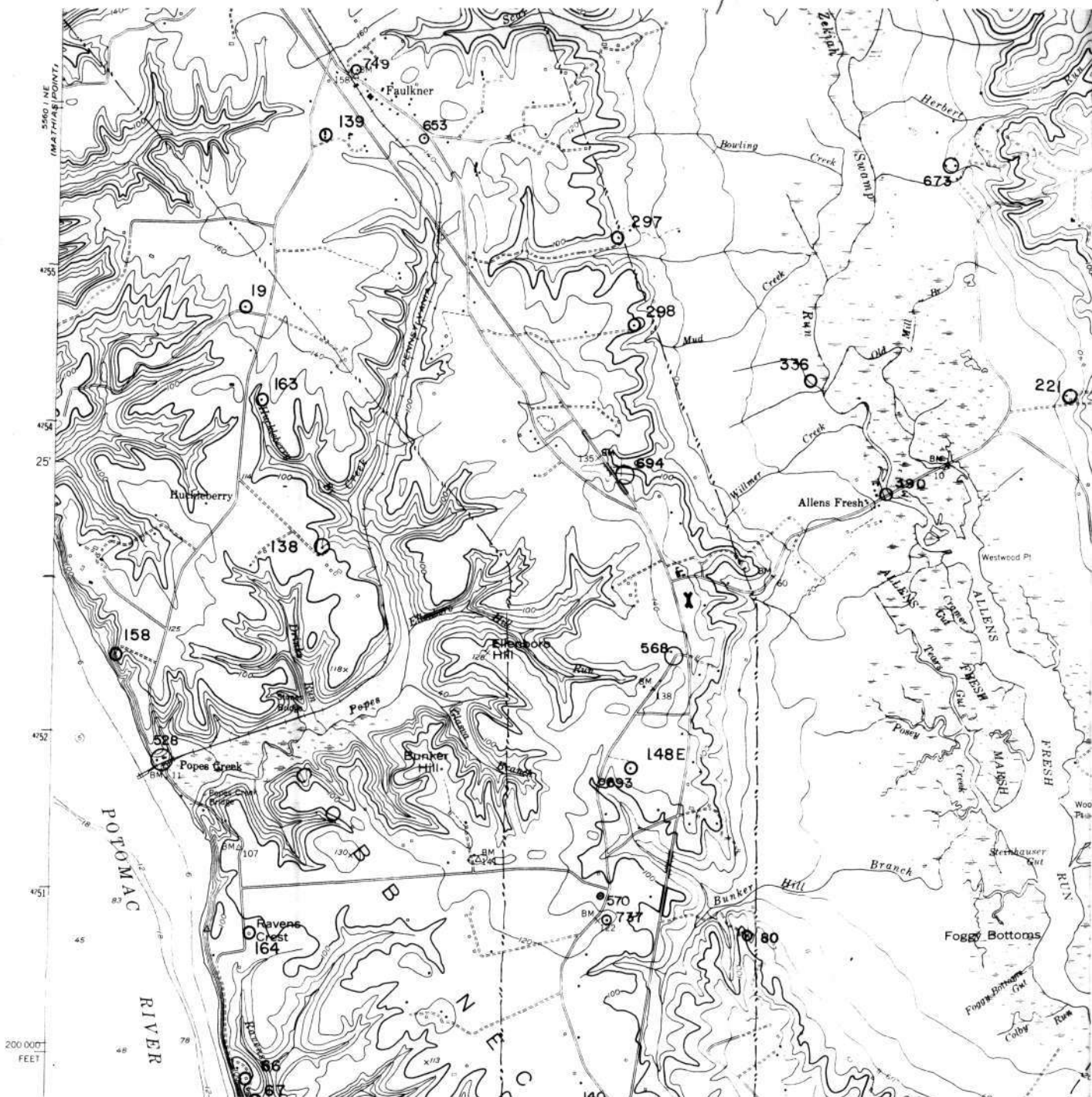
1st corner




7/27/53
HUGHES Co.
F.C.D.

CH-390

Popes Creek Quad



A black and white photograph of a highway guardrail. The guardrail is made of concrete and has a series of vertical slats. A white sign with the number '0803700' is attached to the left side of the guardrail. The guardrail is located on the side of a road, with a dense forest in the background.

0803700

CH 392

SILVER BRIDGE 8037, MD 234 OVER

AUER'S FRESH

CHARGES CO., MD.

KATZ

10/16/06

MD SHPO

Northern parapet at west end of bridge

1/7



CH-390

SNA BRIDGE 8037 MD 234 OVER

AUGEN'S FRESH

CHARLES CO. MD

GREG, KATZ

10/16/02

MD SNPO

Northern parade at east end of bridge

2/7



CN-390

SNAP BRIDGE 8037, MD 24 OVER

AULENS FRESH

CHARLES CO., MD

GREG KATZ

10/16/06

MD SAPO.

View north of south elevation

3/7



CN-390

~~SA~~ BRIDGE 0057, MID 234 OVER

AULSWORTH FRESH

CHARLES Co., MD

GREG KATZ

10/16/06.

MID ~~APQ~~

View of bridge from western approach

4/7



CN-390

SAN BRIDGE 8037, MD 234 OVER
AUGUS FRESH

CHARLES Co., MD

GREG KATZ

10/16/06.

MD SAPO.

View of bridge from western end

5/7



CN-390.

SNAP PARADISE, 8037 WMD 230 OVER
Always Fresh

CHARLES CO., MD.

GREG KATZ

10/16/56

WMD SAFO

Close-up view of south elevation

6/7



CN-390

SAN BRIDGE 8037, MD 234 COR
RUEV'S FRESH

CHARLES CO. MD

GREG KATZ

10/16/06.

MD SANPO

View of southern parapet from western side

7/7

Maryland Historical Trust

Maryland Inventory of Historic Properties number: CH-390

Name: MD 238 OVER ZEKIAH SWAP
234

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended <u>X</u>	Eligibility Not Recommended _____
Criteria: <u>A</u> <u>B</u> <u>X</u> <u>C</u> <u>D</u> Considerations: <u>A</u> <u>B</u> <u>C</u> <u>D</u> <u>E</u> <u>F</u> <u>G</u> <u>None</u>	
Comments: _____ _____ _____	
Reviewer, OPS: <u>Anne E. Bruder</u>	Date: <u>3 April 2001</u>
Reviewer, NR Program: <u>Peter E. Kurtze</u>	Date: <u>3 April 2001</u>



Maryland Inventory of Historic Properties
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

MHT Number CH-390

Name and SHA No. 8037 over Zekiah Swamp

Location:

Street/Road Name and Number: MD ²³⁴235 over Zekiah Swamp

City/Town: Allens Fresh Vicinity X

County: Charles

Ownership: X State ___ County ___ Municipal ___ Other

This bridge projects over: ___ Road ___ Railway X Water ___ Land

Is the bridge located within a designated district: ___ yes X no

___ NR listed district ___ NR determined eligible district

___ locally designated ___ other

Name of District _____

Bridge Type:

___ Timber Bridge

___ Beam Bridge ___ Truss-Covered ___ Trestle

___ Timber-and-Concrete

___ Stone Arch

___ Metal Truss

___ Movable Bridge

___ Swing

___ Bascule Single Leaf ___ Bascule Multiple Leaf

___ Vertical Lift ___ Retractable ___ Pontoon

X Metal Girder

___ Rolled Girder X Rolled Girder Concrete Encased

___ Plate Girder ___ Plate Girder Concrete Encased

___ Metal Suspension

___ Metal Arch

☐ Metal Cantilever

☐ Concrete

☐ Concrete Arch ☐ Concrete Slab ☐ Concrete Beam

☐ Rigid Frame

☐ Other Type Name _____

Description:

Describe Setting:

Bridge No. 8037 carries Maryland Route ²³⁴235 east-west over Zekiah Swamp Run where it meets with Allens Fresh, a tributary of the Wicomico River. The bridge carries two lanes of traffic over tidal and non-tidal waters. The bridge is located in a rural Charles County. The community of Allens Fresh is visible on the west side of the bridge, with woods to the east. Overhead power lines parallel the south side of the bridge.

Describe Superstructure and Substructure:

Bridge No. 8037 is a rolled girder bridge carrying Maryland Route ²³⁴235 over Zekiah Swamp run. It is a three span bridge with two 63' spans and one 64' span. The bridge is approximately 190' long, 30' wide, with a 1.75" to 3.75" bituminous wearing surface over a 10" thick concrete deck. The abutments, piers and wing walls are all constructed of concrete. The balustrades are open, and the parapet corners appear to have been rebuilt.

Bridge deterioration includes missing balusters, heavy rust, scale, vertical, longitudinal, and map cracking to the abutments, and the concrete encasement on beam 1 has cracked and is broken off.

Discuss Major Alterations:

Previous repairs to the bridge include patching of 60% ± of the deck which is under a new bituminous concrete surface. The curbs have numerous patches and numerous portions of the bridge parapets have been repaired with PAM. The parapet corners appear to have been rebuilt.

History:

When Built: 1933 according to 1994 state bridge inventory

Why Built: Statewide road improvement program

Who Built: Standard state specification

Why Altered: Safety and structural repairs.

Was this bridge built as part of an organized bridge building campaign: Yes, this bridge was constructed as part of the state road improvement program and for local transportation needs.

Surveyor Analysis:

This bridge may have NR significance for association with:

☐ A Events ☐ Person
☒ C Engineering/Architectural

Was this bridge constructed in response to significant events in Maryland or local history:

Bridge No. 8037 is in approximately the same location as an earlier bridge. It is located near the community of Allens Fresh; the age of which is unknown. The road carried by the bridge now runs in an east-west general direction. In the early 20th century this road carried traffic in a north-south direction between Allens Fresh and Dentsville. Both the earlier and the current bridge are the only means of crossing Zekiah Swamp Run within four miles of the current bridge.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

This bridge did not have a significant impact on the growth and development of area.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from historic and visual character of the possible district?

This bridge is not located in an area eligible for historic designation.

Is the bridge a significant example of its type?

This bridge may be a significant example of its type. It is a long state specification metal girder bridge, and should be compared with other examples of its type.

Does the bridge retain integrity of the important elements described in the Context Addendum?

Though this bridge has undergone some modification, the integrity of the primary character defining elements as described in the Context Addendum remain essentially intact.

Should this bridge be given further study before significance analysis is made and Why?

Further study of this bridge is unnecessary. This bridge is eligible for inclusion on the National Register of Historic Places.

Bibliography:

Greiner, Inc.

1995 Maryland Inventory of Historic Bridges

Spero, P.A.C. & Company, and Louis Berger & Associates

1994 Historic Bridges in Maryland: Historic Bridge Context.

State Highway Administration
V.d. Bridge inspection files.
United States Geological Survey
1953 7.5' Popes Creek Quadrangle, photorevised 1974.
United States Geological Survey
1915 15' Wicomico Quadrangle.

Surveyor:

Name: Jason D. Moser **Date:** September 1995

Organization: State Highway Admin. **Telephone:** (410) 321-2213

Address: 2323 West Joppa Road Brooklandville, MD 21022

1953 7.5' North Beach Quadrangle, Photorevised 1979.
United States Geological Survey
1910 15' Prince Frederick Quadrangle.

Surveyor:

Name: Jason D. Moser **Date:** September 1995

Organization: State Highway Admin. **Telephone:** (410) 321-2213

Address: 2323 West Joppa Road Brooklandville, MD 21022

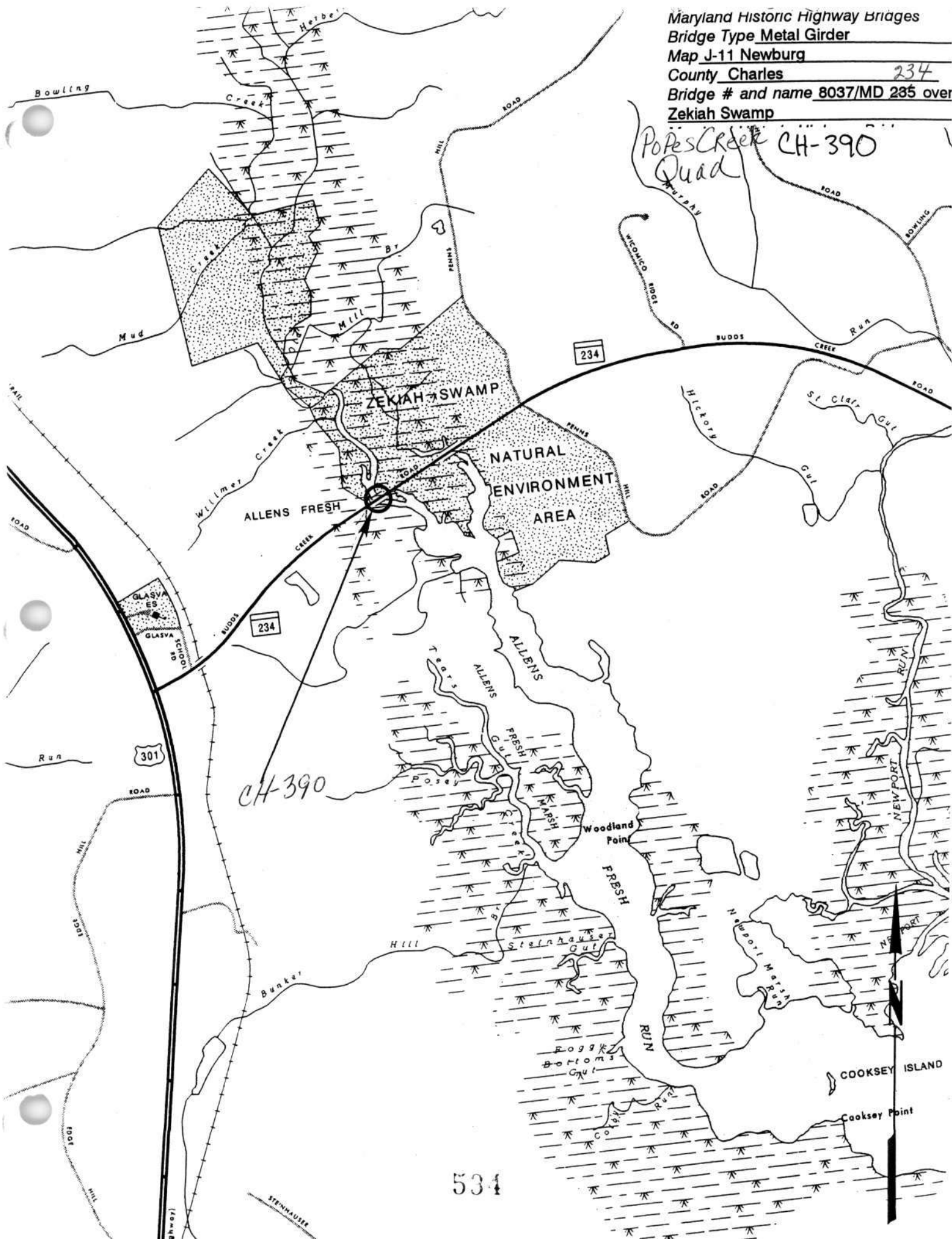
Maryland Historic Highway Bridges
Bridge Type Metal Girder

Map J-11 Newburg

County Charles 234

Bridge # and name 8037/MD 235 over
Zekiah Swamp

Popes Creek Quad CH-390





1 OF 6

CH-390
BRIDGE # 8037
CHARLES COUNTY

D. BHADRIK
2-2-95

MARYLAND SHPO SHA

MD 234 OVER WICOMICO RIVER
LOOKING WEST ON MD 234



CH-390

BRIDGE # 8037

CHARLES COUNTY

D. BAUMIL

2-2-95

~~MARYLAND SHPO SHA~~

MD 234 OVER WICOMICO RIVER

LOOKING NORTH (DOWNSTREAM FACE)



3 OF 6

CH-390
BRIDGE # 8037
CHARLES COUNTY

D. BHAUMIK
2-2-95

MARYLAND SHPO SHA

MD 234 OVER WICOMICO RIVER
LOOKING SOUTH (UPSTREAM FACE)



CH-390

BRIDGE # 8037

CHARLES COUNTY

D. BAUMIL

2-2-95

~~MARYLAND SHPO SHA~~

MD 234 OVER WICOMICO RIVER

LOOKING EAST ON MD 234

WICOMICO RIVER BRIDGE

BUILT - 1935

STATE ROADS COMMISSION

C. CLINTON UHL - CHAIRMAN

E. BROCK LEE ROBERT LACY

F. D. WILLIAMS, JR. - CHIEF ENGINEER

W. C. HOPKINS - BRIDGE ENGINEER

CH-390
BRIDGE # B037
CHARLES COUNTY

5 OF 6

D. RHAUMIK
2-2-95

MARYLAND SHPO SHA

MD 234 OVER WICOMICO RIVER
IDENTIFICATION PLATE

603.

TIDAL &
NON-TIDAL
WATER

PERSONS FISHING ABOVE THIS
LINE MUST HAVE AN ANGLERS
LICENSE AS REQUIRED BY LAW

DEPARTMENT OF
NATURAL RESOURCES
FISHERIES ADMIN.

CH-390

BRIDGE # 8037
CHARLES COUNTY

D. BHAUMIK

2-2-95

~~MARYLAND SHPO SHA~~

MD 234 OVER WICOMICO RIVER

PARAPET CORNER RE BUILT
TYPICAL AT 4 CORNERS